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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,870	03/30/2004	Chih-Heng Wu	ALIP0030USA	2869
27765 7590 01/26/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506			EXAMINER	
			NATNAEL, PAULOS M	
MERRIFIELD, VA 22116			ART UNIT	PAPER NUMBER
			2622	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	NTHS	01/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Summers	10/708,870	WU, CHIH-HENG				
Office Action Summary	Examiner	Art Unit				
·	Paulos M. Natnael	2622				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 11 De	ecember 2006					
	,					
<u>,                                    </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
	x parte Quayre, 1999 O.D. 11, 40	73 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.		•				
4a) Of the above claim(s) is/are withdraw	n from consideration.					
5)⊠ Claim(s) <u>1-7</u> is/are allowed.						
6)⊠ Claim(s) <u>8 and 11</u> is/are rejected.						
7)⊠ Claim(s) <u>9 and 10</u> is/are objected to.						
,	olootion roquirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the o	frawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Exa						
Priority under 35 U.S.C. § 119	,					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents	. Name to a second of the seco					
2. Certified copies of the priority documents						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
Information Disclosure Statement(s) (PTO/SB/08)   Paper No(s)/Mail Date	5)  Notice of Informal P. 6)  Other:	atent Application				
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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims **8** and **11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA).

Considering claim 8, the claimed (a) deinterlacing the plurality of first display data and the plurality of second display data to generate a plurality of third display data is met by the disclosure in the APA (Fig.5; Para. [0006]-[0009]); (b) arranging the plurality of third display data to make the plurality of third display data correspond to a second resolution; is met by Fig.6 of the APA as well as Para. [0006]-[0009]);, and c) extracting a plurality of fourth display data corresponding to a plurality of second odd fields from the plurality of third display data, and extracting a plurality of fifth display data corresponding to a plurality of second even fields from the plurality of third display data, is met by Fig.7 and Para. [0006]-[0009]);

As to the claimed wherein in step (a), a motion adaptive deinterlace algorithm is applied to generate the plurality of third display data, the APA does not specifically discloses using a motion adaptive deinterlace algorithm. However, the examiner takes official notice in that the claimed "motion adaptive deinterlace algorithm" is notoriously

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well known in the art of de-interlacing video images and, therefore, it would have been obvious to the skilled in the art at the time the invention was made to utilize such an algorithm in order to easily detect motion in the image data and process the data accordingly.

Considering claim **11**, the APA discloses using the bi-linear interpolation methods to process the display data. [see 0007].

## Allowable Subject Matter

- 3. Claims **1-7** are allowed.
- 4. Claims **9** and **10** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De Haan, US 6618094 discloses de-interlacing image signals utilizing motion adaptive de-interlacing algorithm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 8AM-4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 574-272-1000.

Paulos M. Natnael Primary Patent Examiner

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January 21, 2007